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## SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JULY 2016

(CUCSS - PG)

(Applied Geology)

## CC15P GEL2 C07 - HYDROGEOLOGY

(2015 Admission)

Time: Three Hours

Maximum: 36 Weightage

- I Short answer type questions. Answer *all* questions
  - 1) Meteoric Water.
  - 2) Stiff Diagram.
  - 3) Arsenic and Fluoride Contamination.
  - 4) Hydrograph.
  - 5) Ghyben-Herzberg relationship.
  - 6) Lineament mapping.
  - 7) Springs.
  - 8) Physical properties of water.
  - 9) Problems of over exploitation.
- 10) Water table draw down.
- 11) Radio Isotopes.
- 12) Caliper logging.
- 13) Specific Capacity.
- 14) Types of Aquifers.

(14x1=14 weightage)

- II Short essay type questions. Answer any seven questions.
  - 15) Water table contour map.
  - 16) VES and Different methods.
  - 17) Artificial water recharge methods.
  - 19) Application of remote sensing in groundwater exploration.
  - 20) Determination of permeability in the laboratory.
  - 21) Methods for prevention of Salt water intrusion.

- 22) Vertical distribution of Ground water.
- 23) Darcy's Law and its applications.
- 24) Ground water problems related to Foundation and Mining.

 $(7 \times 2 = 14 \text{ weightage})$ 

- III Long essay type questions. Answer any two questions.
  - 25) Describe the procedures of a pump test and the evaluation of aquifer parameters using this method.

OR

- 26) Different stages in construction of a well.
- 27) Describe the various hydrological properties of rocks with suitable figures and Examples.

OR

28) Ground water exploration methods.

(2 x4 = 8 weightage)

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